#### TITLE 326 AIR POLLUTION CONTROL BOARD

### LSA Document #98-114

# SUMMARY/RESPONSE TO COMMENTS FROM THE THIRD COMMENT PERIOD

The Indiana Department of Environmental Management (IDEM) requested public comment from June 1, 1998, through June 30, 1998, on IDEM's proposed rule language. IDEM received comments from the following parties:

Black & Decker (B&D)
Crystal Clean Parts Washer Services (Crystal)
National Independent Parts Cleaners Association
United States Environmental Protection Agency (U.S.EPA)

Following is a summary of the comments received and IDEM's responses thereto:

#### General

Comment: The requirement regarding the sales of over five (5) gallons of solvent in a seven (7) day period imposes compliance obligations on a wide variety of retail establishments that will not be aware of the requirement and that carry mineral spirits, paint thinners, and charcoal lighter fluids, all of which may be used by small businesses and individuals in cold cleaning degreasing operations. (Crystal)

Response: IDEM will provide coordinated outreach to users, suppliers, and manufacturers of cold cleaning solvents in the state. This will include press releases and targeted mailings to call attention to these rule changes. The department believes that due to the quantity of solvent used in commercial cold cleaning operations and the lower per gallon costs offered by larger suppliers, facilities engaged in cold cleaning would not typically purchase their solvents at department stores with auto supply sections and small retailers. Solvents such as charcoal lighter fluid and paint thinners are not usually sold in containers larger than a quart or a gallon and are not ordinarily used for degreasing. In addition, vendors will have a responsibility for informing their customers of the new requirements and ensuring that they provide compliant solvents.

*Comment:* What proportions of the volatile organic compounds (VOC) in Lake, Porter, Clark, and Floyd counties come from cold cleaning degreasers and from car emissions? Is the state seeking to eliminate a small source in order to avoid more difficult emission controls? (B&D)

*Response:* State and federal air quality plans and regulations have steadily addressed the significant sources of air pollution in these four counties. Motor vehicles and large industrial sources are now significantly controlled, and states are looking further into the emissions

inventory to identify other categories where emissions reductions can be achieved cost effectively.

On-road mobile source emissions account for approximately forty percent (40%) of the total VOC emissions in both nonattainment areas, while cold cleaning degreasers account for approximately two to three percent (2-3%), which is a significant percentage for a single type of activity, even though it may seem small. The department seeks to provide a balanced approach to achieving reductions of ozone precursors, such as volatile organic compounds, necessary for the affected nonattainment areas to come into compliance with federal air quality standards. This includes measures to reduce VOC emissions from larger industrial point sources, area sources (such as degreasers and surface coating operations), and mobile sources (both on and non-road). Degreasing operations are a significant source of VOC emissions, relative to industrial sources and other area sources. Several measures have been implemented to address VOC emissions from on road mobile sources. These include mandatory biennial vehicle inspection and maintenance programs, cleaner fuels, and vapor recovery devices for retail gasoline marketers. These programs have been in place for several years and have been demonstrated to be effective in reducing VOC emissions from on road mobile sources. In addition, transportation planning efforts in the nonattainment areas are coordinated with air quality planning to ensure that transportation projects do not have a negative impact on air quality.

Comment: Most solvent evaporation loss is from the drying of parts, as all of a solvent eventually evaporates whether it is a high or low vapor pressure solvent. Proposals similar to IDEM's have shown very minimal gain in improving air quality because parts cleaning solvents are such small contributors to air quality problems. (NIPCA)

*Response:* Estimated VOC emissions associated with cold cleaning degreaser operations are slightly over eleven thousand (11,000) pounds per day in the four affected counties. While emissions from a single source may not seem significant, the large number of operations within the affected counties result in significant emissions.

Comment: This rule does not specify a test method for the determination of the true vapor pressure of cold cleaning solvent. A test method is necessary to adequately enforce this rule. U.S.EPA recommends that Indiana either adopt a test method that is included in U.S.EPA's 1992 Volatile Organic Compound model rules for degreasing by the American Society for Testing and Materials (ASTM) D323-89 or use the test method that the state of Illinois adopted. (U.S.EPA)

*Response:* The U.S. EPA agrees with IDEM that the record keeping requirements of this rule will allow for adequate enforcement.

#### **Costs**

Comment: Cost estimates cited by IDEM appear to be understated. Heritage's estimates are in excess of \$1,000.00 per ton of VOC reduction, not counting administrative and capital costs. IDEM has not offered hard, measured data from the other areas of the country where similar regulations are in place. Moreover, costs of compliance with hazardous waste rules are not addressed. (B&D) (Crystal) (NIPCA)

*Response:* The rule has only recently been implemented in other areas of the country with limited data available on transition costs. However, in discussions with states where similar limitations have been applied, transition costs have not been unreasonable. It is the department's understanding that the same equipment will be used, and, therefore, there will be no capital costs associated with compliance. Administrative costs would vary depending on the vendor. However, the vendor should already have some invoice system in place to track sales and other services. Costs associated with compliance with hazardous waste regulations are not expected to increase.

Comment: Compliance dates should be delayed to give time for thorough evaluation of actual costs to users, providers, and manufacturers and of measurable air quality benefits, and also to take into account budget adjustments for new suppliers and new parts. (Crystal)

*Response:* The compliance dates have been moved back from those in the originally proposed rule. As the proposed rule states, the compliance dates will be phased in to allow solvent users and suppliers ample time to acquire and adjust to the use of the lower vapor pressure solvents.

*Comment:* Is it the official position of IDEM that the 1997 memorandum from the President justifies actions costing \$10,000 for "reasonable reductions?" Is this amount per parts washer unit or per ton of VOC theoretically eliminated? (B&D)

*Response*: Cost effectiveness estimates are generally expressed in terms of dollar per ton of pollutants reduced. Estimates of the cost effectiveness of this proposed rule are significantly under the \$10,000 figure mentioned in the Presidential memorandum.

Comment: Many small businesses and manufacturers may be affected by this regulation. It is not clear what precise economic impact the current proposal would have on these operations or that an adequate cost-benefit rationale exists. (NIPCA)

*Response:* The department believes that the requirements of this rule provide a cost-effective approach to reducing VOC emissions. Other options such as capture and control would require equipment retrofits, other capital expenditures and ongoing operational costs. While solvent costs may increase, the ongoing costs of complying with this rule will be significantly less than other options. It should be emphasized that this rule builds upon requirements for cold cleaning degreaser operations that are already in place.

## **Alternatives**

Comment: Air quality improvements intended by this rule are unlikely to be measurable

through the use of lower vapor pressure solvents. Many types of equipment changes, such as vapor recovery devices, aqueous rinses, and special drying racks, are available that would meet the desired goals of reduced air pollution. The use of solvents with lower aromatics should be an option. In addition, operational practices, such as better instructional material and more effective employee and client training, can help. (Crystal) (NIPCA)

Response: The department agrees that operational practices play an important role in reducing emissions from cold cleaning degreaser options and would like to emphasize that this rule builds upon equipment and work practice requirements that are already in place. While air quality improvements are really only measurable in one way, through ambient air quality measurement, the emission reductions from the use of lower vapor pressure solvents are readily quantifiable. Past experience has demonstrated that reducing emissions of ozone precursors, such as VOCs, results in improved air quality. Other alternatives for compliance are available, but the state rule would require sources to demonstrate that a proposed alternative would achieve emission reductions equivalent to those required by this rule.

Comment: According to IDEM's response to a comment made at the first public hearing, alternative solvents are available in other areas of the country where similar limitations have been implemented. What are these solvents? IDEM also stated that it will work with companies affected by this rule. What state resources will be allocated to this effort? (B&D)

*Response:* Suppliers in Maryland have experienced no difficulties in providing solvents to meet similar requirements. For the most part, naphtha or petroleum based solvents have been used. The department will provide coordinated outreach to users, suppliers, and manufacturers of cold cleaning solvents in the state. This will include press releases and targeted mailings to call attention to these rule changes. In addition, vendors will have a responsibility for informing their customers of the new requirements and ensuring that they provide compliant solvents.

#### **Exemptions and variances**

*Comment:* Exemptions and variances should be available for alternative design units that can demonstrate VOC reduction equivalent to that achieved by the proposed rule. Specific exemptions should be available to small businesses that have fewer than a specific number of parts washer units. Small businesses are unlikely to be aware of statutory variances or have the resources to pursue them. (Crystal)

*Response:* Other alternatives for compliance are available, but the state rule would require sources to demonstrate that emission reductions equivalent to those required by this rule would be achieved. If a vendor has an alternative compliance option, they may wish to consider providing support to their customers in making any requisite equivalency demonstrations.

Comment: In regard to variances, what is an undue hardship or burden, and who is to decide this? (B&D)

*Response:* The IDEM commissioner reviews applications for variances (see IC 13-14-8-8), and makes decisions based on consideration of all relevant factors, including whether an undue

hardship or burden exists. Note that a variance lasts for only one year, but may be renewed for the same period of time.